



Resources

Audio-Visual Materials

Groundwater: Wisconsin's Buried Treasure. (slide/tape) 1982. Available on loan from: Wisconsin Geological and Natural History Survey, 1815 University Avenue, Madison, Wisconsin 53706.

Wisconsin's Groundwater (16mm film). Rentals available from: Bureau of Audio Visual Instruction; P.O. Box 2093; Madison, WI 53701-2093; (608)262-3902; toll free in Wisconsin: 1-800-362-6888. BAVI has a large selection of groundwater-related films and videos. Write or call for a complete list. Many local and University libraries also carry this film. For purchase information contact: Department of Agricultural Journalism, University of Wisconsin-Madison, 440 Henry Mall, Madison, Wisconsin 53706; (608)262-1463.

RESOURCE PEOPLE:

Representatives from the following groups can explain their interest in groundwater and can often give insight into groundwater problems or issues of local interest. Contact with the community not only helps reinforce what is learned in the classroom, but helps develop concern and sustains the enthusiasm of students.

Before you involve a resource person in your class, discuss with him or her your objectives and what you expect from his/her visit.

- ❖ water chemists
- ❖ well drilling contractors (contact your local DNR office)
- ❖ pump dealers
- ❖ Department of Natural Resources environmental specialists (addresses of DNR district offices are found in the last section of this guide)
- ❖ municipal/county health or environmental specialists or county planners
- ❖ county University of Wisconsin-Extension resource or agricultural agents
- ❖ water treatment plant operators

- ❖ hydrologists, hydrogeologists and engineers—private industry and governmental agencies

ADDITIONAL FIELD TRIP IDEAS:

When planning a field trip, be sure to secure permission and discuss your activity with people at the site before your visit.

- ❖ municipal or county landfill site—possibly monitoring wells
- ❖ municipal water treatment plant—well water tower
- ❖ well drilling site (list available from local DNR office)
- ❖ State Laboratory of Hygiene (Madison, Wisconsin)
- ❖ private water testing laboratory (list of certified labs available from local DNR office)
- ❖ agricultural operation—irrigation with wells, integrated pest management
- ❖ water resource sites—springs, rivers, lakes, wetlands
- ❖ beverage or food processing industries
- ❖ rock exposures showing groundwater effects

GENERAL GROUNDWATER REFERENCES:

A Citizen's Handbook on Groundwater Protection. W. Gordon. Natural Resources Defense Council, New York, NY. 1984.

America's Priceless Groundwater Resource Fact and Fiction: The Story of Underground Water. 1977. Available from the National Water Well Association (see agencies and organizations).

Groundwater, A Non-technical Guide. J. Wilson Academy of Natural Sciences, Philadelphia, PA. 1982.

Groundwater Hydrology. H. Bower. McGraw-Hill Book Company, New York, NY. 1978

Groundwater and the Rural Homeowner. Single copies of booklet are free from: U.S. Geological Survey: Books and Open-File Reports Section, Box 25425, Denver, Colorado 80225.

Safe Water: A Fact Book on the Safe Drinking Water Act for Non-Community

Systems. Available from the American Water Works Association (see agencies and organizations).

BULLETINS AVAILABLE FROM UW-EXTENSION OFFICES

(cost between \$0.25 and \$1.00 per bulletin, contact Extension office for current prices):

A7POG *Protecting Our Groundwater—A Grower's Guide*

G3399 *Maintaining Your Home Well Water System*

G3378 *Improving Your Drinking Water Quality*

G3339 *Drinking Water Contamination: Understanding the Risks*

G3338 *How Drinking Water Standards Are Established*

G3213 *Pesticides in Groundwater: How They Get There; What Happens to Them; How to Keep Them Out*

G3054 *Nitrate in Wisconsin's Groundwater: Sources and Concerns*

G2967 *Nonpoint Pollution: How Wisconsin Cities Affect Water Quality*

WI DNR PUBLICATIONS:

"Groundwater: Protecting Wisconsin's Buried Treasure" in *Wisconsin Natural Resources*. Vol. 13, No. 4. August 1989.

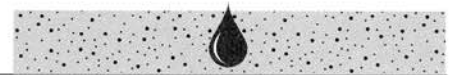
Special Recycling Edition. *Wisconsin Natural Resources*. Vol. 8, No. 4. July-August 1985.

"A Matter Of Chance, A Matter of Choice: Environmental Risk in Wisconsin" in *Wisconsin Natural Resources*. Vol. 13, No. 2. April 1989.

"The Cleanup Game" in *Wisconsin Natural Resources*, Vol. 13: No. 1. February 1989.

The following materials are available from the WI DNR Bureau of Information and Education (for a complete list write Wisconsin DNR, Bureau of Information and Education, P.O. Box 7921, Madison, WI 53707):

Hazardous Wastes in Your Home
Saving Wisconsin's Water



Water Conservation

Answers to Your Questions About Groundwater

Nitrates in Drinking Water

Pesticides in Drinking Water

Radium in Drinking Water

Volatile Organic Chemicals in Drinking Water

Lead in Drinking Water

Groundwater and Land Use in the Water Cycle—poster

WISCONSIN GEOLOGICAL AND NATURAL HISTORY SURVEY PUBLICATIONS:

The Wisconsin Geological and Natural History Survey has a variety of inexpensive groundwater-related publications and maps. For a catalog of recent publications, write to 3817 Mineral Point Road; Madison, Wisconsin 53705.

AGENCIES AND ORGANIZATIONS:

United States:

National Water Well Association
500 West Wilson Bridge Road
Suite 135
Worthington, OH 43085

U.S. Environmental Protection Agency
401 M Street, SW
Washington, D.C. 20460

U.S. Environmental Protection Agency
Region V, Office of Public Affairs
230 S. Dearborn
Chicago, IL 60604
(Safe drinking water "hotline"
1-800-426-4791)

U.S. Geological Survey
National Center
Reston, VA 22092

Environmental Task Force
1346 Connecticut Ave., Suite 912
Washington D.C. 20036

Environmental Defense Fund
1616 P Street NW
Washington D.C. 20036

American Water Works Association
1010 Vermont Ave. NW
Washington D.C. 20005

The Freshwater Foundation
2500 Shadywood Road, Box 90
Navarre, MN 55392

Wisconsin:

Wisconsin Geological and Natural History Survey
3817 Mineral Point Road
Madison, WI 53705

U.S. Geological Survey
Wisconsin Office
1815 University Avenue
Madison, WI 53706

Department of Natural Resources
Box 7921
Madison, WI 53707

Bureau of Water Resources Management
Bureau of Water Supply
Bureau of Information and Education
Six district offices with groundwater coordinators.

Department of Health and Social Services
Bureau of Community Health and Prevention
Box 309
Madison, WI 53707

Department of Industry, Labor and Human Relations
(regulations for septic and other underground storage tanks)
Safety and Buildings Division
Box 7969
Madison, WI 53707

Department of Agriculture, Trade and Consumer Protection
(pesticide use and regulations)
Agricultural Resource Management Division
Box 8911
Madison, WI 53707

University of Wisconsin-Extension
(agricultural practices, water supply, waste disposal, etc.)

Environmental Resources Unit
216 Agriculture Hall
1450 Linden Drive
Madison, WI 53706

University of Wisconsin-Madison
Water Resources Center
1975 Willow Drive
Madison, WI 53706

Central Wisconsin Groundwater Center
010 Student Services Building
University of Wisconsin—Stevens Point
Stevens Point, WI 54481

State Laboratory of Hygiene
University of Wisconsin
465 Henry Mall
Madison, WI 53706

Citizens for a Better Environment
111 King Street
Madison, WI 53703

League of Women Voters
Wisconsin Chapter
121 S. Hancock Street
Madison, WI 53703-3447

Wisconsin's Environmental Decade
14 W. Mifflin Street
Madison, Wisconsin 53703

WATER RESOURCES CURRICULA:

Discovering Groundwater: A Supplementary Activities Guide for Upper Elementary Social Studies and Science Classes. 1984. WI DNR, Western District. (Out of print)

Aquatic Project WILD. 1987. Western Regional Environmental Education Council. For workshop information, contact Project WILD Wisconsin, WI Department of Natural Resources, Box 7921, Madison, WI 53707.

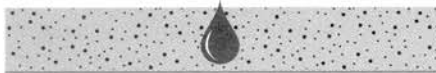
Groundwater: A Vital Resource, Student Activities. Cedar Creek Learning Center in cooperation with the Tennessee Valley Authority, Knoxville, TN 37902.

Groundwater: Michigan's Hidden Resource, Workbook. 1989. Michigan Department of Natural Resources, Environmental Response Division, P.O. Box 30028, Lansing, MI 48909.

Groundwater Quality Protection in Oakland County: A Sourcebook for Teachers. 1984. The East Michigan Environmental Action Council, 21220 West 14 Mile Road Birmingham, MI 48010.

GREAT: Groundwater Resources and Educational Activities for Teaching. 1989. Iowa Department of Natural Resources, Wallace Building, Des Moines, IA 50319.

Groundwater: Illinois Buried Treasure, Education Activity Guide. 1989. Illinois Department of Natural Resources, Office of Resources and Planning, 325 W. Adams, Room 300, Springfield, IL 62704-1892.



Earth: The Water Planet. J. Gartrell, J. Crowder and J. Callister, National Science Teachers Association. 1742 Connecticut Ave. NW, Washington, DC 20009.

Groundwater Study Guide. 1984. Wisconsin Department of Natural Resources. (out of print)

Local Watershed Problem Studies. 1981. Cooperative Educational Service Agency 16, Waukesha, WI and the Water Resources Center 1975 Willow Drive, Madison, WI. (out of print)

OUTLOOK. A series of groundwater curricula for upper elementary through high-school. For information, contact Institute for Environmental Education, McCollum Science Hall, University of

Northern Iowa, Cedar Falls, IA 50614.
Ground-Water Protection Curriculum Guide. Missouri Department of Natural Resources, P.O. Box 176, Jefferson, MO 65102.

Recycling Study Guide. 1988 WI DNR, Bureau of Information and Education, Box 7921, Madison, WI 53707.

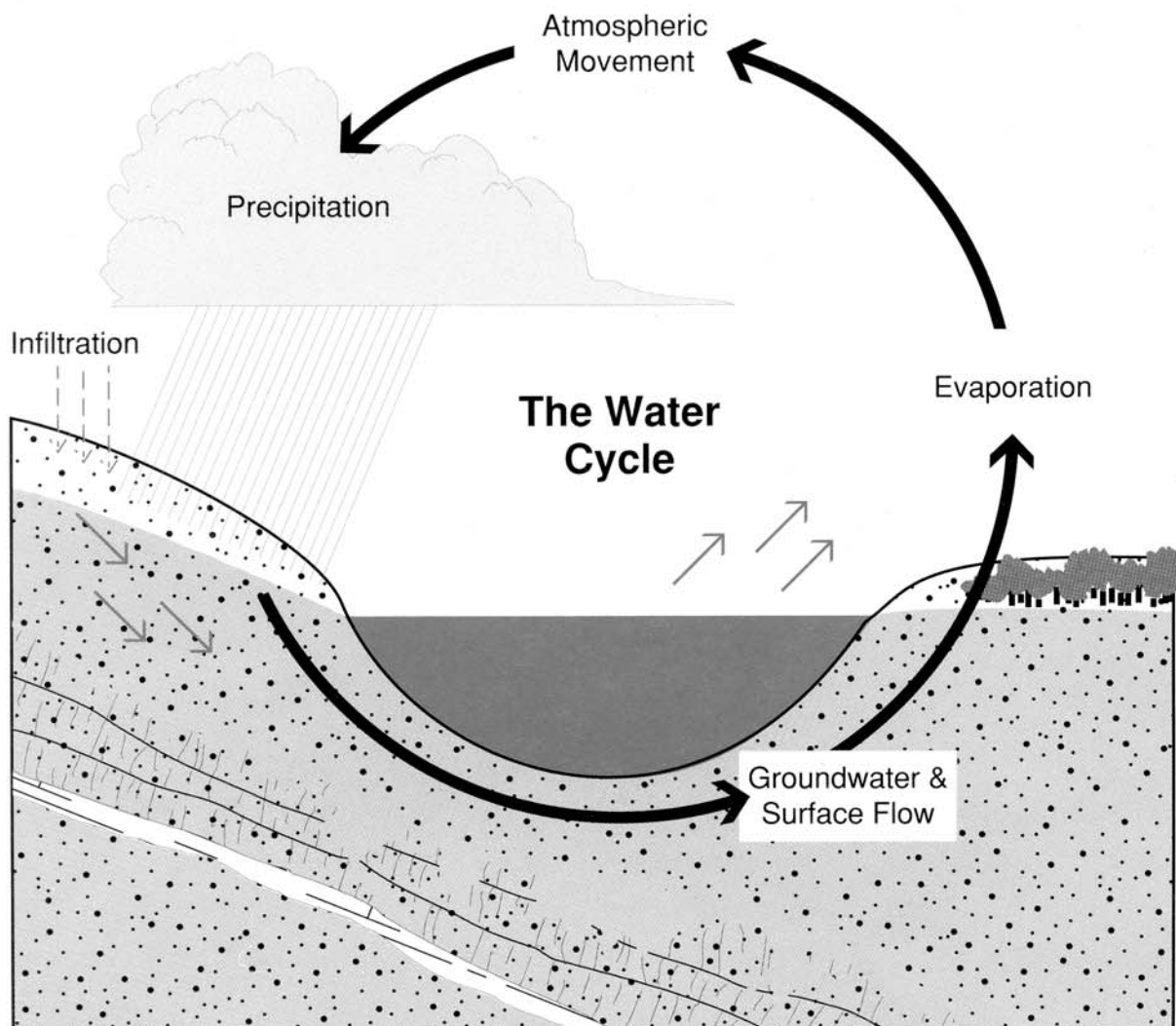
A Sense of Water. Southern Arizona Water Resources Association, 465 W. St. Mary's Road, Suite 100, Tucson, AZ 85705.

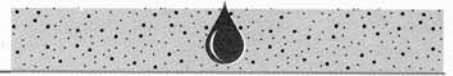
Water-Related Teaching Activities. 1977. H. Coon and C. Price. ERIC Center for Science, Mathematics and Environmental Education, Ohio State University, 1200 Chambers Roads, 3rd floor, Columbus, OH 43212.

ADDITIONAL EDUCATIONAL MATERIALS:

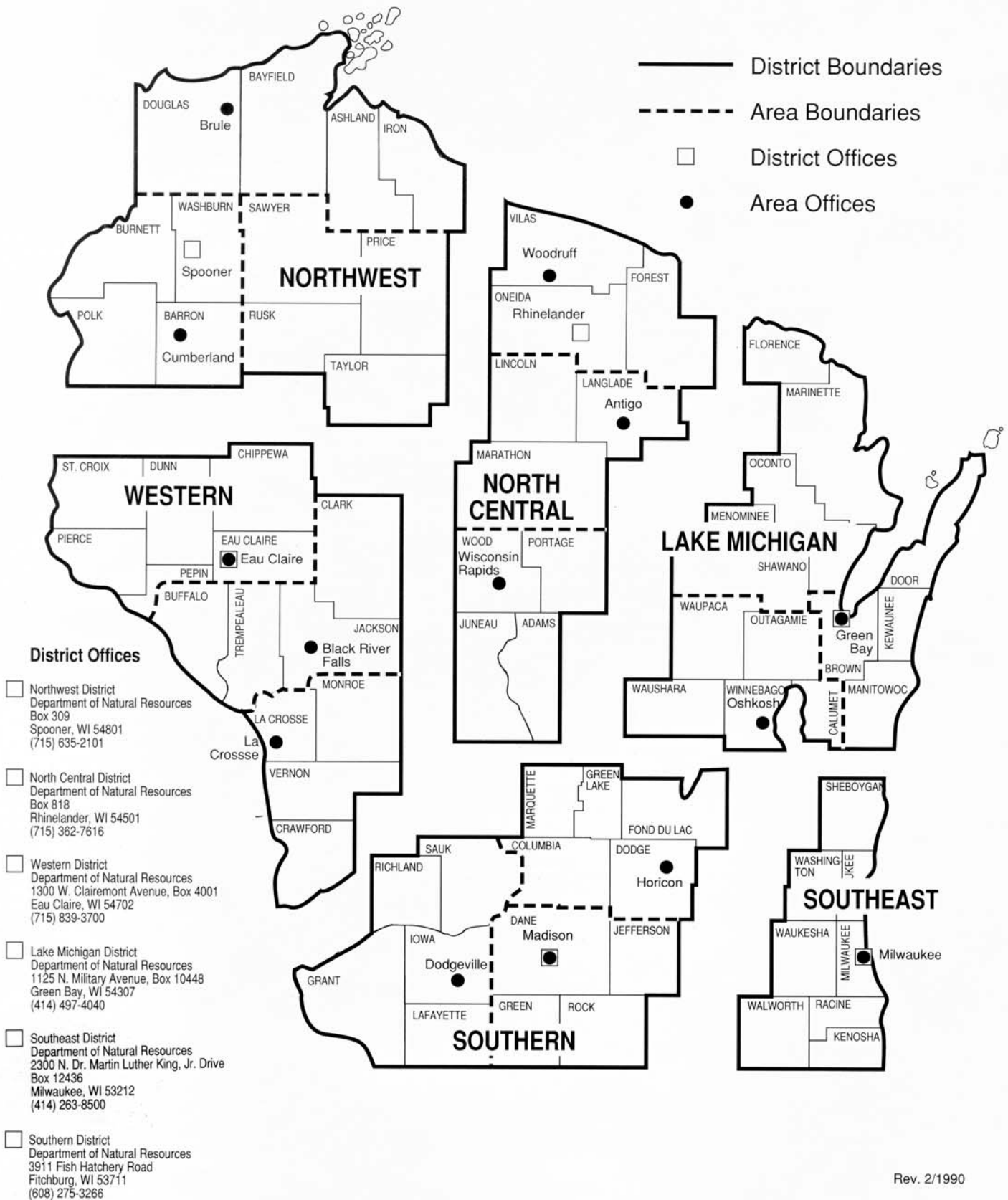
Groundwater Flow Demonstration Model. Two-dimensional Plexiglass groundwater model. Available on loan basis or for sale. Contact: Central Wisconsin Groundwater Center, 010 Student Services Building, University of Wisconsin-Stevens Point, Stevens Point, WI 54481, (715) 346-4270

Household Hazardous Waste Wheel and Water Sense Wheel (home water conservation ideas) may be purchased from: EMHI, 10 Newmarket Road, P.O. Box 932, Durham, NH 03824





DNR Field Districts and Areas



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